

Technical Data Sheet

Compressor model **GPY12AAa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R134a**

APPLICATION

Application	Low Back Pressure
Refrigerant	R134a
Evaporating Temp.	-35,0 °C to -10,0 °C
Expansion	Capillar
Comp. Cooling	Static
Max. ambient temp.	43,0 °C
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	12,10 cm ³
Diameter	27,00 mm
Stroke	21,13 mm
Net Weight	12,07 Kg
Oil type	ISO VG 32 ESTER
Oil charge	400 cm ³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-264 V
Type	RSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	16,00 A
Max. Cont. Current (MCC)	2,30 A
Main W. resist. at 25°C	6,25 Ω
Start W. resist. at 25°C	15,40 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	280 kCal/h	241 W
COP	1,23 W/W	0,96 W/W
EER	1,06 kCal/Wh	0,83 kCal/Wh
Input Power	265 W	252 W
Current	1,70 A	1,65 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2		
Reference	4TM424NFBYY	T0377		
Current	14,50 A	12,00 A		
Time check	5-15 seg	7,5-14 seg		
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 62,00 °C		

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	155	180	1,41	1,00	0,86
40	-30	212	209	1,50	1,18	1,01
40	-25	283	240	1,61	1,37	1,18
40	-23,3	309	251	1,65	1,43	1,23
40	-20	366	273	1,73	1,56	1,34
40	-15	461	307	1,86	1,75	1,51
40	-10	570	342	2,01	1,94	1,67

45	-35	148	179	1,40	0,96	0,83
45	-30	204	211	1,51	1,13	0,97
45	-25	273	244	1,62	1,30	1,12
45	-23,3	300	256	1,67	1,36	1,17
45	-20	355	279	1,75	1,48	1,27
45	-15	449	315	1,90	1,66	1,43
45	-10	557	353	2,06	1,84	1,58

50	-35	142	179	1,40	0,92	0,79
50	-30	196	213	1,51	1,07	0,92
50	-25	264	248	1,64	1,24	1,06
50	-23,3	290	260	1,68	1,29	1,11
50	-20	344	285	1,78	1,41	1,21
50	-15	437	323	1,93	1,57	1,35
50	-10	543	363	2,10	1,74	1,50

55	-35	135	178	1,40	0,88	0,76
55	-30	188	214	1,52	1,02	0,88
55	-25	255	252	1,65	1,18	1,01
55	-23,3	280	265	1,70	1,23	1,06
55	-20	334	291	1,80	1,33	1,15
55	-15	425	332	1,97	1,49	1,28
55	-10	530	374	2,15	1,65	1,42

60	-35	128	177	1,40	0,84	0,72
60	-30	180	216	1,52	0,97	0,84
60	-25	245	256	1,67	1,12	0,96
60	-23,3	270	270	1,72	1,17	1,00
60	-20	323	297	1,82	1,26	1,09
60	-15	413	340	2,00	1,41	1,22
60	-10	517	385	2,20	1,56	1,34

65	-35	122	177	1,40	0,80	0,69
65	-30	172	217	1,53	0,92	0,79
65	-25	236	260	1,68	1,06	0,91
65	-23,3	260	274	1,74	1,10	0,95
65	-20	312	303	1,85	1,20	1,03
65	-15	401	349	2,04	1,34	1,15
65	-10	503	395	2,25	1,48	1,27

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	169	180	1,41	0,94	0,81
40	-30	235	209	1,50	1,12	0,97
40	-25	314	240	1,61	1,31	1,13
40	-23,3	343	251	1,65	1,37	1,18
40	-20	404	273	1,73	1,48	1,28
40	-15	506	307	1,86	1,65	1,43
40	-10	620	342	2,01	1,81	1,57

45	-35	155	179	1,40	0,87	0,75
45	-30	216	211	1,51	1,02	0,89
45	-25	289	244	1,62	1,18	1,02
45	-23,3	317	256	1,67	1,24	1,07
45	-20	374	279	1,75	1,34	1,16
45	-15	471	315	1,90	1,50	1,29
45	-10	580	353	2,06	1,65	1,42

50	-35	141	179	1,40	0,79	0,68
50	-30	197	213	1,51	0,93	0,80
50	-25	265	248	1,64	1,07	0,92
50	-23,3	291	260	1,68	1,12	0,96
50	-20	345	285	1,78	1,21	1,04
50	-15	436	323	1,93	1,35	1,17
50	-10	540	363	2,10	1,49	1,28

55	-35	128	178	1,40	0,72	0,62
55	-30	178	214	1,52	0,83	0,72
55	-25	241	252	1,65	0,96	0,83
55	-23,3	264	265	1,70	1,00	0,86
55	-20	315	291	1,80	1,08	0,93
55	-15	401	332	1,97	1,21	1,05
55	-10	500	374	2,15	1,34	1,15

60	-35	114	177	1,40	0,64	0,55
60	-30	159	216	1,52	0,74	0,64
60	-25	216	256	1,67	0,85	0,73
60	-23,3	238	270	1,72	0,88	0,76
60	-20	285	297	1,82	0,96	0,83
60	-15	366	340	2,00	1,08	0,93
60	-10	459	385	2,20	1,19	1,03

65	-35	100	177	1,40	0,57	0,49
65	-30	140	217	1,53	0,64	0,56
65	-25	192	260	1,68	0,74	0,64
65	-23,3	212	274	1,74	0,77	0,67
65	-20	256	303	1,85	0,84	0,73
65	-15	331	349	2,04	0,95	0,82
65	-10	419	395	2,25	1,06	0,92

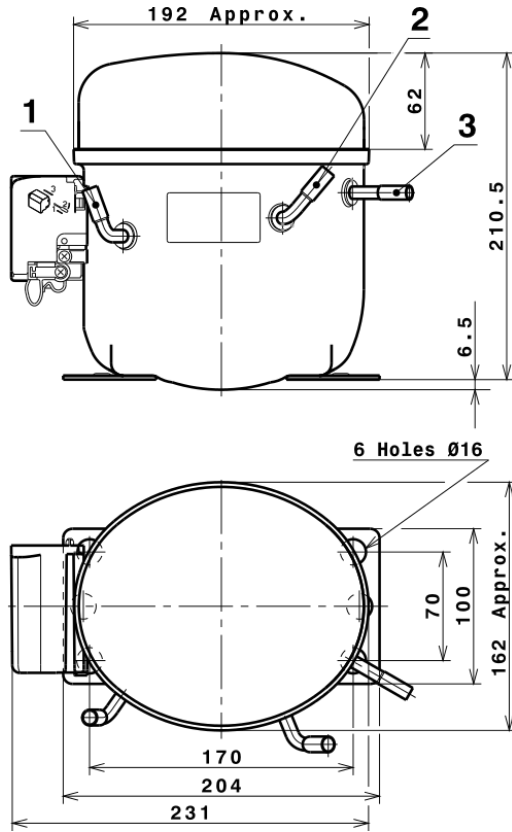
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.288,1413169683	303,5103961088	1,8648148482	22,854879624654
2	37,0885611597	4,3944024922	0,0244246836	0,73720870402012
3	-10,4408144434	3,1125167689	0,0137968693	-0,07655950046718
4	0,2342436326	0,0323365058	0,0003477259	0,0063886823602916
5	-0,2189480232	0,0928204900	0,0004065711	-0,0012948228161095

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

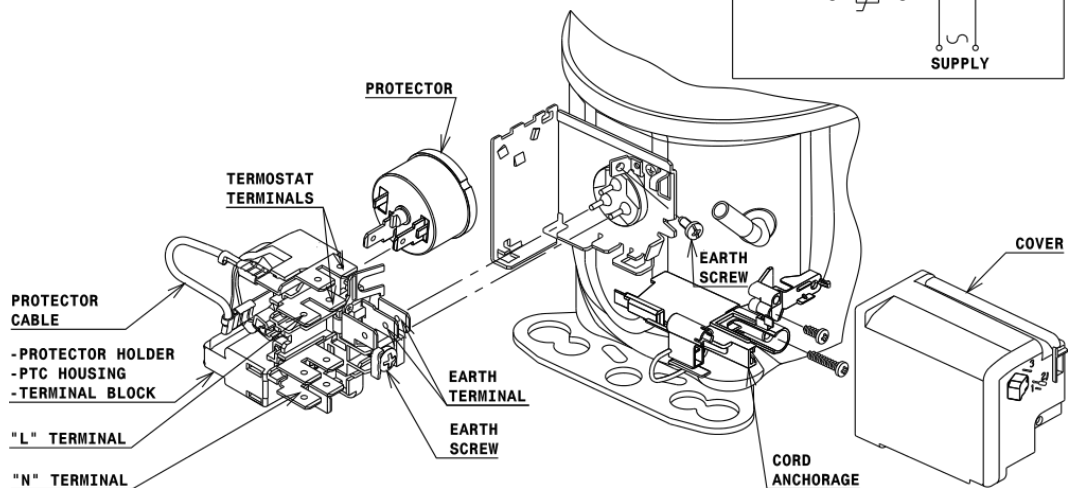
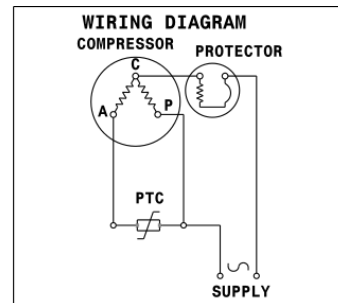
COMPRESSOR DIMENSIONS



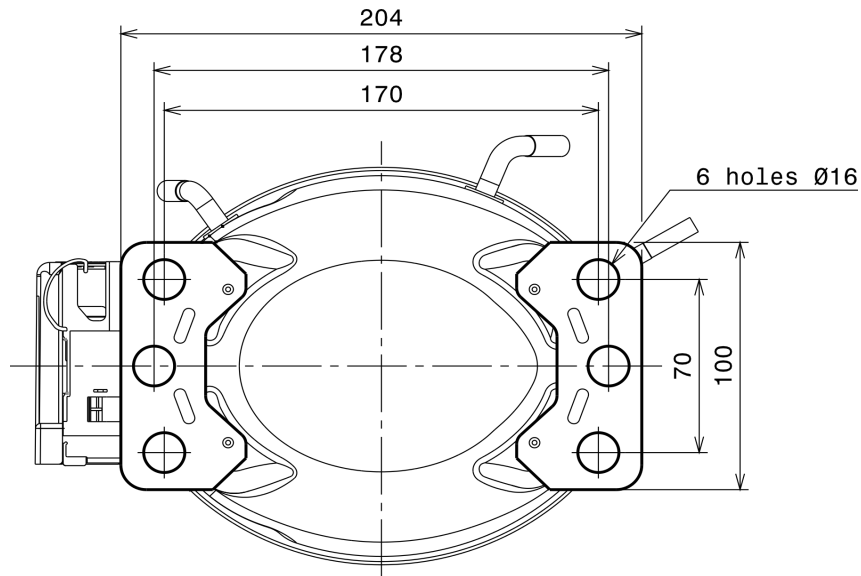
DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



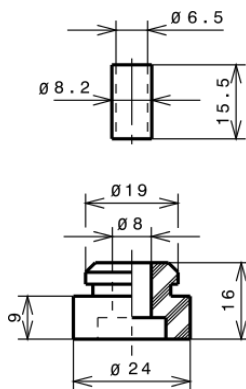
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

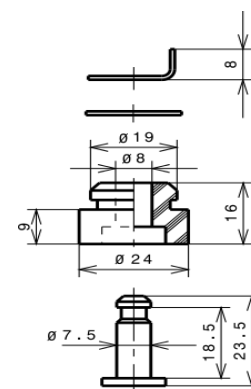
STANDARD

$\varnothing 16$ holes (170x70 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a LBP

